



SEE THE DAYS, SOLVE THE TAX: AN AI-INTEGRATED VISUAL AND GAMIFIED LEARNING INNOVATION IN TAXATION EDUCATION

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ABSTRACT

Residence status for individuals is one of the most technical challenges in Taxation 1 for accounting students due to its day-count test and complicated requirements under Section 7 of the Income Tax Act 1967. Students struggled to correctly apply Section 7 and related provisions, leading to poor performance on this topic. This challenge indicates the need for an innovative, technology-driven pedagogical approach with the aim of simplifying these concepts and improving students' accuracy in tax classification through visual and interactive learning strategies. This innovation incorporates an AI-integrated visual and gamified learning approach. It transforms conventional notes into an interactive digital poster using NotebookLM that includes the key statutory tax rules in visually structured, clear, and simplified summaries. Learning is then reinforced through Quizizz, providing a gamified platform to test students' understanding of this topic with instant feedback. The novelty of this approach integrates AI to transform content into interactive visuals and fun quizzes in a tax course, which can help students stay engaged, remember what they learn and prepare better for exams. This approach improves tax literacy and digital learning adaptability among future accounting professionals. It also can reduce the stress among students and enhance student attraction through a gamified approach using Quizizz, turning a passive environment into an active, competitive, and enjoyable experience. It has high commercial potential as a digital learning kit for universities and professional accounting bodies. In conclusion, this innovation modernizes tax education, transforming a technical topic into an easily mastered digital subject for accounting students.

KEYWORDS: AI in Education, Gamification Strategy, Residence Status, Tax Education, Visual Learning.



PROBLEM AND OBJECTIVE

Section 7 of the Income Tax Act (ITA) 1967 governs the residency status of individuals in Malaysia (Inland Revenue Board of Malaysia, 2017). This chapter is often a difficult topic for accounting students enrolled in Taxation 1. An individual residency status is determined by the statutory days test, which requires them to be present in Malaysia for a certain period during the year of assessment. Traditionally, the lecturer delivered this topic through comprehensive lecture notes that include thorough explanations and legal provisions related to Section 7. However, these text materials make it difficult for the students to understand the key concept of the topic. As a result, students exhibit low motivation and engagement (Pillai et al., 2025). The growth of digital technologies and artificial intelligence (AI) presents opportunities for lecturers to improve students' engagement and comprehension. This innovation aims to incorporate AI, a visual learning methodology, and gamification in the teaching of Taxation 1. The main objective of this innovation is to improve students' comprehension of the requirements of residence status while simultaneously fostering students' engagement through visual learning and a gamified approach. Additionally, this innovation assists students in accurately applying concepts during examinations, which can enhance their performance and understanding of taxation rules. According to Sulaiman et al. (2025), the integration of gamification in tax education mitigates the difficulty of the subject and low levels of students' engagement. The finding is supported by Nadeem et al. (2023), who found that incorporating digital games can effectively motivate students and sustain their interest and these games and activities encourage enjoyable learning experiences.

DESIGN DESCRIPTION

First, using the notebookLM, the lecturer's notes on residence status are transformed into an interactive digital poster, an AI tool that helps present the information in a structured format. The poster summarizes the key rules of Section 7 and conditions related to residence status. During the class, the digital poster serves as a learning tool in which students review the visual materials to quickly identify the requirements of the day's test and understand the provisions applied. In the next process, students participate in a Quizizz activity to reinforce their comprehension of the subject matter. This gamified platform requires the students to answer questions related to the topic and they receive immediate feedback on their responses. The integration of this method transforms a traditional approach into an interactive learning experience.

VISUALS

The development of this innovation follows a systematic process. It transforms conventional notes into an interactive digital poster using NotebookLM. It is further reinforced by the gamified platform to foster an engaging and high-retention learning environment. The following are the visual poster and gamified platform used in this innovation:

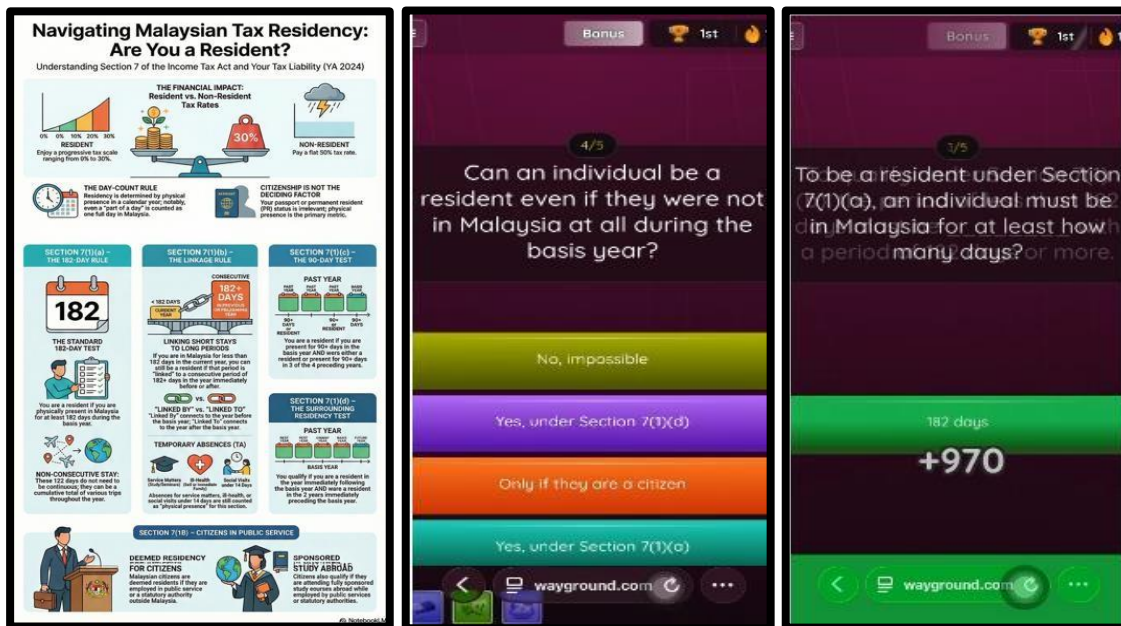


Figure 1.0: Digital Poster using NootbookLM and Quizizz platform

NOVELTY AND UNIQUENESS

The novelty of this innovation is the integration of AI, visual learning posters, and gamification in the teaching of the resident status topic. The traditional approach often relies on text-based materials. This innovation transforms the content of the topic into visually structured learning materials in the use of NotebookLM that can be easily understood by the students. Another uniqueness of this innovation is the use of Quizizz, an interactive online platform that turns quizzes into games, to promote active engagement among students. The integration of this method creates a more dynamic and student-centered teaching approach and the use of technologies in enhancing learning in taxation education.

BENEFITS TO MANKIND

This innovation offers many benefits to students and lecturers as well as the community. The use of visual materials helps to simplify the complex and technical concept of taxation, as well as enhance students' understanding of the subject matter. The digital poster helps students to identify key requirements of Section 7 of the ITA 1967 and effectively apply accurate concepts in answering the examination. The use of the Quizizz platform allows students to identify their weaknesses, reduce stress and helps to reinforce their understanding of the topic. For lecturers, the integration of AI, visual learning posters, and gamification into the taxation field provides a more effective approach and enhances students' engagement, which can improve the examination outcomes (Pillai et al. 2025; Nadeem et al, 2023). Furthermore, the digital transformation of tax education, by introducing AI and gamification approaches, enhances learning experiences and equips better preparation for real-world application in the taxation area (Sulaiman et al., 2025).



COMMERCIAL POTENTIAL

The growing demand for digital teaching tools led to the potential development of the TaxVision Learning Kit, which has strong commercialization potential, as it can simplify the complex subject of taxation. This digital learning product could be widely used by universities, colleges, and professional training institutions related to accounting and taxation. Furthermore, this innovation can be applied to other taxation topics, such as capital allowance and employment income, resulting in the development of a series of digital learning modules for taxation education.

CONCLUSION

In conclusion, this innovation transforms the traditional approach of teaching taxation that relies heavily on the text materials provided by the lecturer. The integration of AI, visual learning posters, and gamification helps increase students' understanding of residence status, which leads to better results in the examination. It also could promote students' engagement and improve teaching and learning processes by providing an interactive approach to cater to different learning styles. Furthermore, the commercial potential of the digital learning kit could be widely used in the taxation-related field, particularly in providing interactive materials and engaging resources that simplify the complex taxation subject for students. Therefore, this innovation modernizes tax education, transforming a technical topic into an easily mastered digital subject for accounting students.

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